ON-PQ510M0W34
MIFARE & QR Code proximity reader
User Manual

Ver.19.1

Introduction

ON-PQ510M0W34 is a proximity reader which reads ISO 14443A contactless card/keytag and QR code then send out some standard data format for connecting to Wiegand input of the access control systems. The users may select the suitable models for connecting to dedicated controller or PC for various applications.

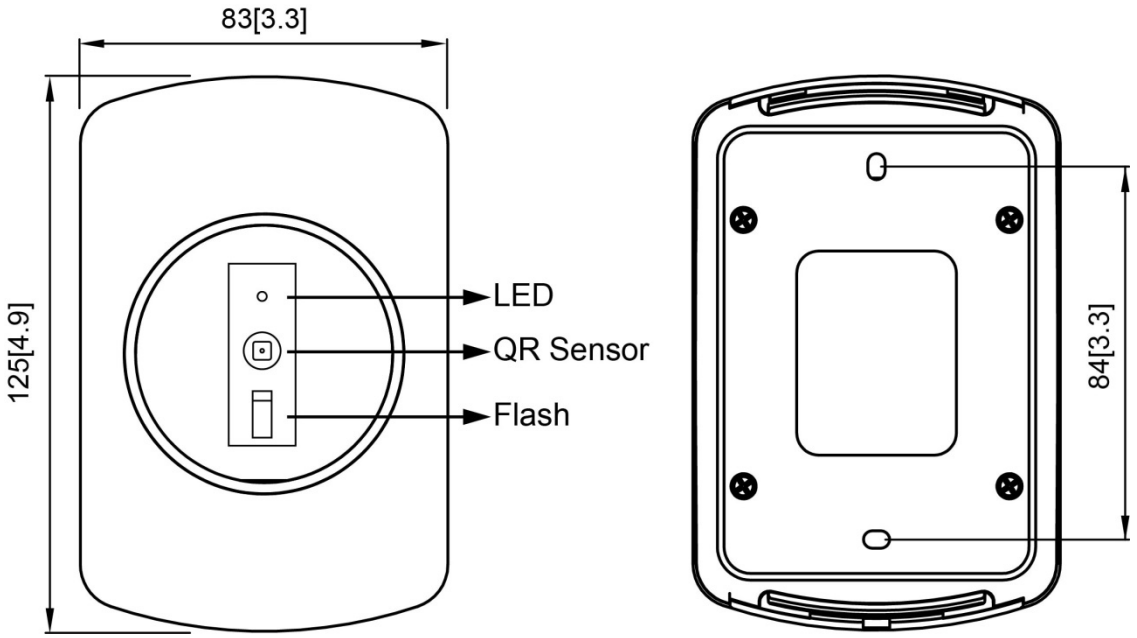
Specification

RFID frequency	13.56KHz	
Applicable cards	Mifare 14443A S50/S70	
Reading range	Card	Max. 6cm
	Tag	Max. 2.5cm
	QR code	0~16cm
Output format	Wiegand 34 bits	
Power input	12 VDC	
Standby / Operating current	128mA±10% @ 12 VDC 140mA±10% @ 12 VDC	
Flash	Yellow (Power On)	
LED	Red (Scanning)	
Buzzer	Scanned	
Material	ABS	
Dimensions(L) ×(W) ×(H)	125 x 83 x 27mm / 4.9 x 3.3 x 1.1inch	
Operating temperature	-10℃~75℃	
Storage temperature	-20℃~85℃	

Installation Guide

- Drill a 8 mm hole on the wall for passing the cable.
- Drill two 5 mm holes to fix the reader on the wall with provided screws.
- Please make sure to connect wires correctly with the access controller.
- Please use linear (not-switching) type power supply that is isolated from other devices.
- Once you use a separate power supply for the reader, a common ground should be connected between the reader and the controller system.
- For signal transmission, a shielding cable connecting to the controller will reduce the interferences from the external environment.

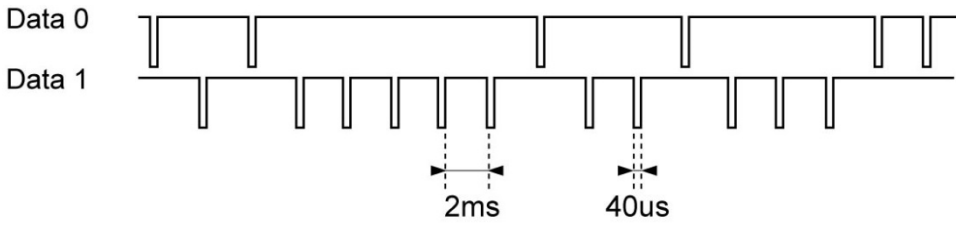
- **Dimension: Unit:mm[inch]**



- **Wire configuration**

Function		
J1		
Wire No	**Color**	**Function**
1	Brown	+12V
2	Red	GND
3	Orange	DATA0
4	Yellow	DATA1
5	Green	---
6	Blue	---
7	Purple	---
8	Gray	---

- **Data formats**



Wiegand 26 bits output format

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
E	E	E	E	E	E	E	E	E	E	E	E	E	O	O	O	O	O	O	O	O	O	O	O	O	O
Summed for even parity(E)													Summed for Odd parity(O)												

Even parity “E” is generated by summing from bit1 to bit13; Odd parity “O” is generated by summing from bit14 to bit26.

Wiegand 34 bits output format

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Summed for even parity(E)																	Summed for Odd parity(O)																

C= Card number

Even parity “E” is generated by summing from bit1 to bit17; Odd parity “O” is generated by summing from bit18 to bit34.

Specifications subject to change without notice for further modification.